INTERNATIONAL SEARCH REPORT

International application No. PCT/US03/00804

| A. CLASSIFICATION OF SUBJECT MATTER | | | |
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| IPC(7) :B65G 37/00 | | | |
| US CL :198/572 According to International Patent Classification (IPC) or to both national classification and IPC | | | |
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| B. FIELDS SEARCHED | | | |
| Minimum documentation searched (classification system followed by classification symbols) | | | |
| U.S. : 198/572, 575, 577, 347.1 | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields | | | |
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| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) | | | |
| NONE . | | | |
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| C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
| Category* Citation of document, with indication, where appropriate, of the relevant passages | | | Relevant to claim No. |
| A | US 3,789,286 A (TOWNE et al.) 29 Jan | 1-33 | |
| | entire document. | | |
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| A | US 3,968,626 A (HOBBS) 13 July 19 | 7/6 (13/07/19/6), see entire | 1-33 |
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| | US 4.604.704 A (EAVES et al.) 05 August 1986 (05/08/1986), see 1-33 | | |
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| D v i i i i i i i i i i i i i i i i i i | | | |
| Further documents are listed in the continuation of Box C. See patent family annex. | | | |
| Special categories of cited documents: "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand | | | |
| "A" document defining the general state of the art which is not considered the principle or theory underlying the invention to be of particular relevance | | | |
| "E" carlier document published on or after the international filing date "X" document of particular relevance; the claimed invention of considered novel or cannot be considered to involve an invention of considered novel or cannot be considered to involve an invention of considered novel or cannot be considered to involve an invention of considered novel or cannot be considered to involve an invention of considered novel or cannot be considered novel o | | | |
| "L" do | comment which may throw doubts on priority claim(s) or which is ted to establish the publication date of another citation or other | when the document is taken alone | |
| special reason (as specified) considered to involve an inventive step when the | | when the document is combined | |
| | | with one or more other such does obvious to a person skilled in the art | |
| "P" document published prior to the international filing date but later "A" document member of the same paten than the priority date claimed | | family | |
| Date of the actual completion of the international search Date of mailing of the international search report | | | earch report |
| 24 FEBRUARY 2003 | | 12 MAK 2003 | |
| Name and mailing address of the ISA/US Authorized officer | | | |
| Commissioner of Patents and Trademarks | | | |
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